

Rec'd
3/13/06
8:02am

needs by 3/15/06
if possible

181996

SEARCH REQUEST FORM Scientific and Technical Information Center - EIC2800
Rev. 1/26/2006 This is an experimental format -- Please give suggestions or comments to Jeff Harrison, JEF-4B68, 22511.

Date 3/10/06 Serial # 10/748,097 Priority Application Date 12/30/03

Your Name M. Lewis Examiner # 73172

AU 2829 Phone 202-1838 Room 5A30

In what format would you like your results? Paper is the default. PAPER DISK EMAIL
If submitting more than one search request form, please prioritize the searches in order of need.

Where have you searched so far on this case?

Circle: USPT DWPI EPO Abs JPO Abs IBM TDB
Other: Need before 3/15

What relevant art have you found so far? Please attach citations or Information Disclosure Statements.

What types of references would you like? Please checkmark:

Primary Refs ☒ Nonpatent Literature ☐ Teaching Refs ☐
Secondary Refs ☐ Foreign Patents ☐ Other ☐

Is this a "Fast & Focused Search" request? (Circle One) YES NO

A "Fast & Focused Search" is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2800 and on the STIC NPL Web Page at <http://uspto-a-patrr-2/siraapps/stic/npl/nplsearch.htm>

What is the topic, such as the novelty, motivation, utility, or other specific facets defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, registry numbers, definitions, structures, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract and pertinent claims.

Claims 1, 3-9 & 16-21

Fuse

Problem: See paragraphs 5

Solution: " " 6

Provide more space for circuits
to perform other functions

Staff Use Only

Searcher: Michael Lewis

Searcher Phone: 571-272-2663

Searcher Location: STIC-EIC2800, JEF-4B68

Date Searcher Picked Up: 3/14/06

Date Completed: 3/15/06

Searcher Prep/Rev Time: 191

Online Time: 90

Type of Search

Structure (#) ☐

Bibliographic ☒

Litigation ☐

Fulltext ☐

Patent Family ☐

Other ☐

Vendors

STN ☒

Dialog ☒

Questel/Orbit ☐

Lexis-Nexis ☐

WWW/Internet ☒

Other ☐

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3/15/2006 11:18:49 AM

[File 2] INSPEC 1898-2006/Jan W2
 [File 6] NTIS 1964-2006/Jan W4
 [File 8] Ei Compendex(R) 1970-2006/Jan W4
 [File 34] SciSearch(R) Cited Ref Sci 1990-2006/Jan W4
 [File 434] SciSearch(R) Cited Ref Sci 1974-1989/Dec
 [File 35] Dissertation Abs Online 1861-2006/Jan
 [File 65] Inside Conferences 1993-2006/Jan W5
 [File 94] JICST-EPlus 1985-2006/Nov W3
 [File 144] Pascal 1973-2006/Jan W2
 [File 23] CSA Technology Research Database 1963-2006/Jan
 [File 103] Energy SciTec 1974-2006/Jan B1
 [File 31] World Surface Coatings Abs 1976-2006/Jan
 [File 95] TEME-Technology & Management 1989-2006/Jan W5
 [File 57] Electronics & Communications Abstracts 1966-2006/Feb
 [File 68] Solid State & Superconductivity Abstracts 1966-2006/Jan
 [File 60] ANTE: Abstracts in New Tech & Engineer 1966-2006/Jan
 [File 293] Engineered Materials Abstracts 1966-2006/Jan
 [File 239] Mathsci 1940-2005/Feb
 [File 256] TECINFOSOURCE 82-2005/DEC

Set Items Description

S1 4342650 S SEMICONDUCTOR? ? OR SEMI()CONDUCTOR? ? OR PCB? ? OR TAB? ? OR
 PRINT????()CIRCUIT()BOARD? ? OR CIRCUIT???()BOARD? ? OR LOAD()BOARD? ? OR LOADBOARD? ? OR LSI? ?
 OR ASIC? ? OR ELECTRON???()DEVICE? ? OR PRINT???()CIRCUIT??? OR IC? ? OR INTEGRAT????()CIRCUIT???
 OR CHIP? ? OR WAFER??? OR MICROCHIP? ? OR MICRO()CHIP? ? OR VLSI? ?

S2 19857020 S SUBSTRAT???? OR MATERIAL???? OR SURFAC??? OR SUPPORT???? OR INSULAT???? OR
 CONDUCT??? OR STRATUM? ?

S3 2683 S (FUSE? ? OR FUSING OR FUSABLE) (3N) (WINDOW? ? OR CAVIT???? OR OPEN???? OR
 SPAC???? OR HOLE? ? OR ORIFIC???? OR OUTLET? ? OR PERFORAT????) OR FUSE()WINDOW(3N) (SUBSTRAT????
 OR MATERIAL???? OR SURFAC??? OR SUPPORT???? OR INSULAT???? OR CONDUCT??? OR STRATUM? ?)

S4 212087 S FUSE? ? OR (FUSE? ? OR FUSING OR FUSABLE OR PROTECT?????) (3N) (CIRCUIT???? OR
 CHIP? ? OR IC? ? OR INTEGRAT????()CIRCUIT????) OR (SURG??? OR OVERVOLTAGE? ?) (3N) PROTECT???? OR
 (BLOW???? OR BURN??? OR SHORT????) (3N) FUSE? ?

S5 1962579 S (FIRST???? OR SECOND???? OR ONE? ? OR BOTH OR TWO OR EACH OR PAIR???? OR
 COUPL???? OR DUAL???? OR DIFFER?????) (3N) (END? ? OR ENDING OR BOUND???? OR POINT???? OR EDGE?
 ? OR VOLTAGE? ? OR SOURCE? ? OR POWER???? OR TRANSISTOR???? OR DIODE? ? OR RESIST???? OR
 INVERT????)

S6 252716 S (ABOVE OR OVER OR ONTOP OR ON()TOP) (3N) (SUBSTRAT???? OR MATERIAL???? OR
 SURFAC??? OR SUPPORT???? OR INSULAT???? OR CONDUCT??? OR STRATUM? ?)

S7 23 S (UNDER???? OR BENEATH OR BOTTOM OR SUPPORT????) (3N) ((FUSE? ? OR FUSING OR
 FUSABLE) (3N) (WINDOW? ? OR CAVIT???? OR OPEN???? OR SPAC??? OR HOLE? ? OR ORIFIC???? OR OUTLET?
 ? OR PERFORAT????))

S8 0 S S1 AND S2 AND S3 AND S4 AND S5 AND S6 AND S7

S9 456 S S1 AND S3 AND S4

S10 24 S S9 AND S5

S11 23 S S10 AND PY<=2003

S12 21 RD (unique items)

S13 1 S S12 AND (TRANSISTOR???? OR MOS? ? OR METAL()OXIDE()SEMICONDUCTOR? ? OR
 METALOXIDE()SEMICONDUCTOR? ? OR NMOS? ? OR PMOS? ? OR METALOXIDE? ? OR METAL()OXIDE? ?)

S14 2 S S12 AND (DRAIN??? OR (CURRENT OR CONTROL????) (2N) ELECTRODE? ? OR SOURCE? ? OR
 GATE? ?)

S15 0 S S12 AND (ANODE? ? OR CATHODE? ?)

S16 24 S S10 AND S2

S17 1 S S16 AND S6

S18 0 S S16 AND S7

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S19 1588 S S1 AND S4 AND S5

S20 12 S S19 AND ((SPACE? ? OR REGION???? OR AREA? ? OR SECTOR???? OR
SEGMENT?????) (3N) (SAVING OR SAVE?? OR ECONOM??????? OR INCREAS????? OR ENLARG????? OR
MAXIM?????????))

S21 8 RD (unique items)

S22 8 S S21 AND PY<=2003

S23 0 S S10 AND ((SPACE? ? OR REGION???? OR AREA? ? OR SECTOR???? OR
SEGMENT?????) (3N) (SAVING OR SAVE?? OR ECONOM??????? OR INCREAS????? OR ENLARG????? OR
MAXIM????????? OR PROVI?????))

S24 4 S S9 AND ((SPACE? ? OR REGION???? OR AREA? ? OR SECTOR???? OR
SEGMENT?????) (3N) (SAVING OR SAVE?? OR ECONOM??????? OR INCREAS????? OR ENLARG????? OR
MAXIM????????? OR PROVI?????))

S25 4 RD (unique items)

S26 457 S S1 AND S3

S27 4 S S26 AND ((SPACE? ? OR REGION???? OR AREA? ? OR SECTOR???? OR
SEGMENT?????) (3N) (SAVING OR SAVE?? OR ECONOM??????? OR INCREAS????? OR ENLARG????? OR
MAXIM????????? OR PROVI?????))

S28 2 S S14 NOT S13

S29 1 S S17 NOT (S13 OR S14)

S30 8 S S22 NOT (S13 OR S14 OR S17)

S31 4 S S25 NOT (S13 OR S14 OR S17 OR S22)

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[File 344] Chinese Patents Abs Jan 1985-2006/Jan
[File 347] JAPIO Nov 1976-2005/Sep(Updated 060103)
[File 350] Derwent WPIX 1963-2006/UD,UM &UP=200607
[File 371] French Patents 1961-2002/BOFI 200209

Set Items Description

S1 2072148 S SEMICONDUCTOR? ? OR SEMI()CONDUCTOR? ? OR PCB? ? OR TAB? ? OR
PRINT???()CIRCUIT()BOARD? ? OR CIRCUIT???()BOARD? ? OR LOAD()BOARD? ? OR LOADBOARD? ? OR LSI? ?
OR ASIC? ? OR ELECTRON???()DEVICE? ? OR PRINT???()CIRCUIT??? OR IC? ? OR INTEGRAT???()CIRCUIT???
OR CHIP? ? OR WAFER??? OR MICROCHIP? ? OR MICRO()CHIP? ? OR VLSI? ?

S2 9716298 S SUBSTRAT???? OR MATERIAL???? OR SURFAC??? OR SUPPORT???? OR INSULAT???? OR
CONDUCT??? OR STRATUM? ?

S3 4131 S (FUSE? ? OR FUSING OR FUSABLE) (3N) (WINDOW? ? OR CAVIT???? OR OPEN???? OR
SPAC???? OR HOLE? ? OR ORIFIC???? OR OUTLET? ? OR PERFORAT????) OR FUSE()WINDOW(3N) (SUBSTRAT????
OR MATERIAL???? OR SURFAC??? OR SUPPORT???? OR INSULAT???? OR CONDUCT??? OR STRATUM? ?)

S4 203808 S FUSE? ? OR (FUSE? ? OR FUSING OR FUSABLE OR PROTECT????) (3N) (CIRCUIT???? OR
CHIP? ? OR IC? ? OR INTEGRAT???()CIRCUIT????) OR (SURG??? OR OVERVOLTAGE? ?) (3N) PROTECT???? OR
(BLOW???? OR BURN??? OR SHORT????) (3N) FUSE? ?

S5 2016659 S (FIRST???? OR SECOND???? OR ONE? ? OR BOTH OR TWO OR EACH OR PAIR???? OR
COUPL???? OR DUAL???? OR DIFFER????) (3N) (END? ? OR ENDING OR BOUND???? OR POINT???? OR EDGE?
? OR VOLTAGE? ? OR SOURCE? ? OR POWER???? OR TRANSISTOR???? OR DIODE? ? OR RESIST???? OR
INVERT????)

S6 277799 S (ABOVE OR OVER OR ONTOP OR ON()TOP) (3N) (SUBSTRAT???? OR MATERIAL???? OR
SURFAC??? OR SUPPORT???? OR INSULAT???? OR CONDUCT??? OR STRATUM? ?)

S7 124 S (UNDER???? OR BENEATH OR BOTTOM OR SUPPORT????) (3N) ((FUSE? ? OR FUSING OR
FUSABLE) (3N) (WINDOW? ? OR CAVIT???? OR OPEN???? OR SPAC???? OR HOLE? ? OR ORIFIC???? OR OUTLET?
? OR PERFORAT????))

S8 159774 S IC=(H01L-029/00 OR H01L-021/72 OR H01L-027/00 OR H01L-027/02 OR H01L-023/02 OR
H01L-023/12 OR H01L-023/50 OR H01L-023/52 OR H01L-025/065 OR H01L-025/07 OR H01L-025/18 OR H01L-
023/34 OR H05K-001/00 OR H05K-001/11 OR H05K-001/18 OR H05K-007/14)

S9 82458 S MC=(U13-D03A OR U13-E01 OR U11-C05G2A OR U11-D03B2 OR U11-D01A6 OR U14-A03B4 OR
U14-A10 OR V04-Q02A2 OR U11-D01A3 OR U11-E01C OR U14-A10 OR U14-H03C3 OR V04-Q05 OR V04-R05D OR
V04-T01C)

S10 11 S S1 AND S2 AND S3 AND S4 AND S5 AND S6

S11 10 S S10 AND PY<=2003

S12 869 S S1 AND S3 AND S4

S13 140 S S12 AND S8

S14 63 S S13 AND S9

S15 39 S S12 AND ((SPACE? ? OR REGION???? OR AREA? ? OR SECTOR???? OR
SEGMENT????) (3N) (SAVING OR SAVE?? OR ECONOM???? OR INCREAS???? OR ENLARG???? OR
MAXIM???? OR PROVI????))

S16 5 S S15 AND S8

S17 9 S S15 AND S9

S18 6 S S15 AND (TRANSISTOR???? OR MOS? ? OR METAL()OXIDE()SEMICONDUCTOR? ? OR
METALOXIDE()SEMICONDUCTOR? ? OR NMOS? ? OR PMOS? ? OR METALOXIDE? ? OR METAL()OXIDE? ?)

S19 0 S S15 AND (DRAIN??? OR (CURRENT OR CONTROL????) (2N) (ELECTRODE? ? OR SOURCE? ? OR
GATE? ?))

S20 0 S S15 AND (ANODE? ? OR CATHODE? ?)

S21 3925 S S3 AND S4

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S22 155 S S21 AND ((SPACE? ? OR REGION???? OR AREA? ? OR SECTOR???? OR
SEGMENT?????) (3N) (SAVING OR SAVE?? OR ECONOM??????? OR INCREAS????? OR ENLARG????? OR
MAXIM????????? OR PROVI??????))

S23 6 S S22 AND S8
S24 10 S S22 AND S9
S25 2 S S16 AND PY<=2003
S26 4 S S17 AND PY<=2003
S27 4 S S26 NOT S25
S28 5 S S18 AND PY<=2003
S29 5 S S28 NOT (S25 OR S26)
S30 2 S S23 AND PY<=2003
S31 0 S S30 NOT (S25 OR S26 OR S28)
S32 5 S S24 AND PY<=2003
S33 1 S S32 NOT (S25 OR S26 OR S28 OR S30)
S34 10 S S11 NOT (S25 NOT S26 OR S28 OR S30 OR S32)

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(FILE 'HOME' ENTERED AT 13:27:20 ON 15 MAR 2006)

FILE 'CAPLUS' ENTERED AT 13:27:34 ON 15 MAR 2006

L1 420 SEA ABB=ON PLU=ON (FUSE OR FUSING OR FUSABLE) (3A) (WINDOW OR
CAVIT#### OR OPEN#### OR SPAC#### OR HOLE OR ORIFIC#### OR
OUTLET OR PERFORAT####)
L2 678 SEA ABB=ON PLU=ON (FUSE OR FUSING OR FUSABLE) (3A) (CIRCUIT####
OR CHIP OR IC OR INTEGRAT####(W)CIRCUIT####)
L3 92800 SEA ABB=ON PLU=ON (SPAC#### OR REGION#### OR AREA OR
SECTOR#### OR SEGMENT####) (3A) (SAVING OR SAVE OR ECONOM####
OR INCREAS#### OR ENLARG#### OR MAXIM####
OR PROVI####)
L4 2 SEA ABB=ON PLU=ON L1 AND L2 AND L3
D L4 1-2 IBIB ABS
L5 111 SEA ABB=ON PLU=ON L3 AND (FUSE OR FUSABLE)
L6 36 SEA ABB=ON PLU=ON L5 AND (SEMICONDUCTOR OR SEMI CONDUCTOR OR
CHIP OR MICROCHIP OR MICRO CHIP OR LSI OR VLSI)
L7 7 SEA ABB=ON PLU=ON L6 AND (TRANSISTOR OR NMOS OR PMOS OR
METALOXIDE OR METAL OXIDE)
L8 4 SEA ABB=ON PLU=ON L6 AND (ANOD#### OR CATHOD#### OR
ELECTROD####)
L9 7 SEA ABB=ON PLU=ON L7 NOT L4
D L9 IBIB ABS 1-7
L10 2 SEA ABB=ON PLU=ON L8 NOT (L4 OR L7)
D L10 IBIB ABS 1-2
FILE 'STNGUIDE' ENTERED AT 13:37:07 ON 15 MAR 2006

(((((semiconductor or semi-conductor or chip or microchip)and (fuse or fuses or fusable) and ((space or area or region or spacing or sector or segment)<near/3>(maximizing or economizing or economy or economical or increas???? or efficient or enlarge or enlarging or efficiency))))<in>metadata)) <and> (pyr >= 1950 <and> pyr <= 2003)

(((((fuse or fuses or fusable) and ((space or area or region or spacing or sector or segment)<near/3>(maximizing or economizing or economy or economical or increas???? or efficient or enlarge or enlarging or efficiency)))<in>metadata)) <and> (pyr >= 1950 <and> pyr <= 2003)